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**Anchor point for fall restraint**

5 The invention relates to an anchor point for fall restraint against falling from a surface, comprising a fastening means for fastening of a fall restraint means. The invention further relates to a cup covering provided with such an anchor point and also to a surface provided with such a cup covering. Finally, the invention relates to a method for working in secured manner on a surface using a fall restraint means.

10 An anchor point for fall restraint against falling from a surface, with a fastening means such as a fastening eye for fastening a fall restraint means, is known in many forms. Such anchor points were developed to meet the need to prevent workers on a surface such as a roof or against a surface such as a wall from falling. These anchor points are flexible in the sense that diverse types of safety line and safety cable, attached to the fastening means, such as for instance a fastening eye of  
15 various dimensions, can be adapted as desired to the operations to be performed and the requirements of the worker.

The American patent US 5,287,944 describes anchor points which are arranged on a ridged roof and which are arranged permanently thereon using screws. A detachable roof anchor point with a permanent fixed part and a removable, reusable  
20 part is described in American patent US 5,687,535. These anchor points are glued or rivetted in each case onto a flat roof or ridged roof in glue-fixed or permanently fixed manner, which implies that changing the location and/or mounting of such an anchor point cannot be realized in simple manner. Another feature of these anchor points is that due to their form and mounting they form a rigid unit with the construction to  
25 which they are attached. Furthermore, the known anchor points generally consist of a fastening means arranged on a heavy base.

The present invention has for its object, among others, to provide an anchor point comprising a fastening means for fastening of a fall restraint means, and a method for working in secured manner on a surface making use of such an anchor  
30 point which obviates the stated drawbacks, of course without any concessions being made in respect of safety.

In order to achieve the intended object, an anchor point for fall restraint of the type stated in the preamble has the feature according to the invention that, at least during use, the anchor point with fastening means comprises a cup covering for connection to the surface, i.e. this cup covering is intended to be connected to the surface. In this application a cup covering is understood to mean a flat piece of elastic, flexible material, preferably of plastic or bitumen. A fastening eye in particular forms the fastening means for fastening of for instance safety lines or safety cables.

The anchor point for fall restraint preferably comprises at least one profile on which the fastening means is fastened, and which profile is connected to the cup covering. This eye can be welded onto the profile or be arranged on the profile by means of a (lock) nut, washer and sealing ring. A profile in this application is understood to mean a processed piece of metal or plastic which is roughened or profiled as desired.

In a particular embodiment the fastening means is in particular the fastening eye of the anchor point for fall restraint by means of a resilient system. A fastening eye with a strong metal spring is here situated between the upper profile or profile. Should someone fall, this spring will be stretched. When the force is great enough, the spring will even uncoil completely to form a long wire. In this manner the spring absorbs a large part of the force, whereby the anchor point is hardly loaded.

The profile is preferably connected to the cup covering using one or more of the following methods: glueing, adhesion or mechanical processing.

In a preferred embodiment the cup covering to which the anchor point for fall restraint according to the invention is connected is clamped between two profiles, the upper profile of which is arranged on the upper side of the cup covering and the lower profile of which is arranged on the underside of the cup covering. In this preferred embodiment the fastening eye is attached to the upper profile. The lower and upper profile are generally selected so as to be of about equal size, or the upper profile is smaller than the lower profile. During use the cup roof covering is preferably clamped between the two profiles with a nut, washer and bolt, wherein a lock nut is preferably used as nut. The anchor point for fall restraint according to the invention particularly comprises an upper profile provided with protruding pins which fit into holes of the

lower profile so as to enable firm fixing of the cup covering in addition to the clamping.

5 The profile or, in the case of two profiles, the lower profile is preferably perforated, in particular with round or square holes, since glueing or adhering the cup covering to the surface covering or directly to the surface can in this case take place through the holes. In a further preferred embodiment the anchor point for fall restraint according to the invention comprises a profile or, in the case of two profiles, a lower profile with incisions arranged in the direction of the centre thereof, which hereby form a crumple zone. When a force is exerted on the anchor point, the resulting crumple zone ensures a deformation of the anchor point with the result that this deformation reduces the forces on the anchor point. The use of a plurality of said preferred embodiments must also be included in the scope of protection of the invention.

15 After the first cup has been fastened, the invention also provides the option of arranging a second, larger cup roof covering by adhering thereof to the upper profile and arranging thereof over the first cup on the surface covering of the surface.

20 In another preferred embodiment the cup covering to which the anchor point for fall restraint according to the invention is connected comprises at least two almost elongate straps which are connected almost at the centre of the cup covering. The straps of the device are preferably connected to the cup covering using a mechanical process.

The invention also provides a fall restraint system comprising two or more anchor points as described above, wherein the anchor points are mutually connected, for instance by means of a cable.

25 The invention also provides a surface provided with a surface covering and at least one anchor point for fall restraint according to the invention, wherein at least one anchor point is connected to the surface covering via the cup covering. In this preferred embodiment the anchor point is not connected directly to the construction but to the surface covering, wherein the forces exerted on the anchor point for fall restraint according to the invention during a fall are transmitted via the cup covering to the surface covering and distributed over the whole area of the surface covering.

Since the anchor point for fall restraint is connected only to the surface covering, it will be apparent that with this embodiment anchor points can be arranged or removed more easily than has been the case with the anchor points known heretofore. However, a surface without surface covering provided with at least one anchor point for fall  
5 restraint according to the invention, wherein at least one anchor point is connected to the surface via the cup covering and to which the advantage of the distribution of the forces exerted on the anchor point is wholly applicable, also forms part of the present invention.

The cup covering is particularly connected to the surface via the surface  
10 covering or directly to the roof by means of the burning method, hot-air drying method, glueing or mechanical fixing, or a combination thereof.

The surface on which the anchor point according to the invention is applied particularly comprises a roof, more particularly a flat roof.

Finally, the present invention provides a method for working in secured  
15 manner on a surface using a fall restraint means, wherein the fall restraint means is attached to the fastening means, in particular a fastening eye, of an anchor point for fall restraint according to the present invention.

The invention will be further elucidated on the basis of four exemplary  
20 embodiments and a number of figures:

figure 1 shows a top view of an anchor point with a profiled upper profile (1) with a fastening eye (4) and a lower profile of about the same dimension, and a cup covering (3) clamped therebetween;

25 figure 2 shows schematic top, side and front views of an anchor point with a flat upper profile (1) with a fastening eye (4) and a lower profile (2) of about the same dimension;

figure 3 is a top view of an anchor point with a profiled upper profile (1) with a  
30 fastening eye (4) and a lower profile of about the same dimension, and a cup covering (3) clamped therebetween;

figure 4 shows schematic top, side and front views of an anchor point with a profiled upper profile (1) with a fastening eye (4) and a lower profile (2) of about the same dimension;

5 figure 5 is a bottom view of an anchor point with a profiled upper profile (1), which is provided with pins and a fastening eye and a lower profile (2) of about the same dimension as the upper profile, and a cup covering (3) clamped therebetween, with holes (6) for receiving pins of the upper profile therein and a nut (7) on the underside of the fastening eye;

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figure 6 shows schematic top, side and front views of an anchor point with a profiled upper profile (1) which is provided with pins and a fastening eye (4), and a lower profile (2) of about the same dimension with holes (6) for receiving pins (5) of the upper profile therein, and a nut on the underside of the fastening eye and a sealing ring (11);

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figure 7 is a top view of an anchor point with a profiled upper profile (1) with a fastening eye (4) and a lower profile of about the same dimension, and a cup covering (3) clamped therebetween, connected to surface covering (9);

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figure 8 shows schematic top, side and front views of an anchor point with an upper profile (1) with fastening eye (4) and a perforated lower profile (2) of greater dimension than the upper profile with holes (5) and incisions (7);

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figure 9 shows schematic top, side and front views of an anchor point with an upper profile (1) with fastening eye (4) and a lower profile (2) of greater dimension than the upper profile, with a bend (8) in the lower profile;

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figure 10 shows an oblique top view of an anchor point with one profile with a fastening eye (4) and the cup covering (3) arranged on the profile, connected to surface covering (9);

figure 11 shows schematic top, side and front views of an anchor point with one profile (2) with the fastening eye (4);

5 figure 12 is an oblique top view of an anchor point with a fastening eye (4), which is connected roughly at the centre of the cup covering (3) by means of two practically elongate straps (10), connected to surface covering (9).

10 figure 13 is a schematic top view of an anchor point with a fastening eye (4) which is connected roughly at the centre of the cup covering by means of two practically elongate straps (10).

The figures are otherwise for the most part purely schematic and not drawn to scale. Some dimensions in particular may be exaggerated to a greater or lesser extent for the sake of clarity. Corresponding parts are designated as far as possible in the figures  
15 with the same reference numeral.

Figure 1 shows the first embodiment of an anchor point with two profiles, of which only the flat upper profile (1) is visible, of roughly the same size, intended for the purpose of clamping a cup covering (3) therebetween. Figure 2 shows the same  
20 embodiment schematically, wherein the anchor point is shown alone, i.e. without cup covering.

Figure 3 shows a variation of the first embodiment, wherein the cup covering can be additionally secured between the two profiles in that one or both profiles have a profiled surface. Additional securing can also be realized by means of a rough  
25 surface. Figure 4 shows the same embodiment schematically, wherein the anchor point is shown alone, i.e. without cup covering.

A third method of additional securing can be achieved by pins (5) arranged in the upper profile, which pass through the surface covering into holes (6) of the lower profile. Figure 5 shows the underside of an anchor point where this method of  
30 securing is arranged. The same variation of the first embodiment is shown schematically in figure 6.



Finally, figure 7 shows the first embodiment of the anchor point according to the invention with a profiled upper profile (1) also connected to a surface covering (9) via the cup covering (3).

5 A second embodiment of the anchor point according to the invention, wherein lower profile (2) is larger than upper profile (1), is shown schematically in figure 8. The lower profile is formed with incisions and holes so as to form a crumple zone and to enable a better connection to the surface covering (which is not shown). Figure 9 shows a comparable type of anchor point, wherein a bend or outer edge is arranged on the lower profile. This variation prevents premature cutting into the cup covering and  
10 can be arranged in all three embodiments with profiles.

Figure 10 shows a third embodiment of the anchor point according to the invention, comprising one profile on which the fastening eye (4) is arranged. In this figure the anchor point is connected to a surface covering. This embodiment is shown schematically in figure 11.

15 Figure 13 shows a fourth embodiment of an anchor point with a fastening eye (4) which is mechanically connected roughly at the centre of the cup covering (3) by means of two practically elongate straps (10), while figure 14 shows this embodiment schematically.

20 The different embodiments of the anchor point for fall restraint according to the invention have in common that they are lightweight and can be mounted rapidly with simple means and tools. Specific to this anchor point is that the force released during a fall is absorbed in elastic manner by the materials from which the cup covering is manufactured and by the elasticity of the surface finish itself. The anchor  
25 point can moreover be applied on any type of roof construction, the strength of the construction not in principle being an important factor. The forces released during a possible fall, when a person is for instance attached with a fall line with safety hook, fall breaker and harness to the fastening eye of an anchor point, which in turn can form part of an anchoring system formed by different anchor points with a cable  
30 system, are first of all reduced by the profiles or straps themselves in combination with the cup covering. The forces are then transmitted to the already present roof

covering of the roof or directly to the roof itself. The anchor point according to the invention can be applied on any type of roof covering, for instance of bitumen or plastic, and be wholly or partially adhered, mechanically fixed or ballasted with loose material on any type of roof covering construction.

5           The application of the anchor point according to the invention complies with the NEN-EN 795 standard known to the skilled person. This standard specifies the requirements for the testing methods for anchor provisions intended for personal protection against falls. The two essential points from NEN-EN 795 are:

- 10       1. A static test wherein a force of 10 kN can be maintained for 3 minutes (in the direction in which the force can be applied during use).
2. A dynamic test wherein a mass of 100 kg (connected to the anchor point with a steel cable) is stopped in a free fall of 2500 mm.

15           Although the invention has been further elucidated above on the basis of only a few exemplary embodiments, it will be apparent that the invention is by no means limited thereto. On the contrary, many variations and embodiments are still possible within the scope of the invention for a person with ordinary skill in the art.



## Claims

1. Anchor point for fall restraint against falling from a surface, comprising a fastening means for fastening of a fall restraint means, characterized in that, at least  
5 during use, the anchor point with fastening means comprises a cup covering for connection to the surface.
2. Anchor point as claimed in claim 1, characterized in that the fastening means is a fastening eye.  
10
3. Anchor point as claimed in claim 1 or 2, characterized in that the anchor point comprises at least one profile on which the fastening means is fastened, and which profile is connected to the cup covering.
- 15 4. Anchor point as claimed in claim 3, characterized in that the fastening means is attached to the profile by means of a resilient system.
5. Anchor point as claimed in claim 3 or 4, characterized in that the profile is connected to the cup covering using one or more of the following methods: glueing,  
20 adhesion or mechanical processing.
6. Anchor point as claimed in claim 3 or 4, characterized in that the cup covering is clamped between two profiles, the upper profile of which is arranged on the upper side of the cup covering and the lower profile of which is arranged on the underside of  
25 the cup covering.
7. Anchor point as claimed in claim 6, characterized in that the upper profile is provided with protruding pins which fit into holes of the lower profile.
- 30 8. Anchor point as claimed in one or more of the claims 3-7, characterized in that the profile or, in the case of two profiles, the lower profile is perforated.

9. Anchor point as claimed in one or more of the claims 3-8, characterized in that the profile or, in the case of two profiles, the lower profile comprises incisions arranged in the direction of the centre thereof.
- 5
10. Anchor point as claimed in one or more of the claims 1-4, characterized in that the device comprises at least two almost elongate straps which are connected almost at the centre of the cup covering.
- 10
11. Anchor point as claimed in claim 10, characterized in that the straps of the device are connected to the cup covering using a mechanical process.
12. Fall restraint system comprising two or more anchor points as described in one or more of the claims 3-11, wherein the anchor points are mutually connected.
- 15
13. Surface provided with a surface covering and at least one anchor point or fall restraint system as described in one or more of the claims 1-12, wherein at least one anchor point is connected to the surface covering via the cup covering.
- 20
14. Surface provided with at least one anchor point or fall restraint system as described in one or more of the claims 1-12, wherein at least one anchor point is connected to the surface via the cup covering.
- 25
15. Surface as claimed in claim 13 or 14, characterized in that the cup covering is connected to the surface via the surface covering or directly by means of one or more of the following methods: the burning method, hot-air drying method, glueing and mechanical fixing.
- 30
16. Surface as claimed in one or more of the claims 13-15, characterized in that the surface is a roof.

17. Method for working in secured manner on a surface using a fall restraint means, characterized in that the fall restraint means is attached to the fastening means of an anchor point or fall restraint system as described in any of the claims 1-12.

## Abstract

Described is an anchor point for fall restraint against falling from a surface, comprising a fastening means for fastening of a fall restraint means, wherein the  
5 anchor point with fastening means, in particular a fastening eye, comprises a cup covering for connection to the surface. The anchor point comprises at least one profile on which the fastening means is fastened, and which profile is connected to the cup covering. A plurality of such anchor points together, connected for instance using a cable, form a fall restraint system.

10 Also described is a surface provided with a surface covering and at least one anchor point or fall restraint system, wherein at least one anchor point is connected to the surface covering via the cup covering, and also a surface provided with at least one anchor point or fall restraint system, wherein at least one anchor point is connected directly to the surface via the cup covering.

15 Finally, the invention provides a method for working in secured manner on a surface using a fall restraint means, wherein the fall restraint means is attached to the fastening means of an anchor point or fall restraint system as specified above.

Fig. 3

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**Fastening means for fall restraint**

5 The invention relates to a fastening means intended for an anchor point for fall  
restraint against falling from a surface and for fastening of a fall restraint cable, and to  
an anchor point for fall restraint against falling from a surface, comprising a fastening  
means for fastening of a fall restraint means. The invention further relates to a fall  
restraint system comprising two or more such anchor points, and also to a surface  
provided with such a fall restraint system. Finally, the invention relates to a method  
10 for working in secured manner on a surface using a fall restraint system.

An anchor point for fall restraint against falling from a surface generally  
comprises a fastening means enabling click fastening of the fall restraint means. Best  
known is the fastening eye for fastening a fall restraint means, wherein a person can  
secure him/herself to the fastening means of the anchor point using a harness  
15 connected to a lifeline, as for instance described in American patent US 5,687,535. A  
drawback of applying such a fastening eye is however that the person can only attach  
him/herself at one position to one anchor point for securing purposes. Although a  
plurality of anchor points can be connected to each other, for instance by means of a  
cable, being secured to a single anchor point does however limit the freedom of  
20 movement of the secured person.

The present invention has for its object, among others, to provide a fastening  
means intended for an anchor point for fall restraint for fastening a fall restraint  
means, and a method for working in secured manner on a surface by making use of  
such an anchor point which obviates the above stated drawbacks, of course without  
25 any concessions being made in respect of safety. In this patent application an anchor  
point is understood to mean an anchor together with a fastening means. In this patent  
application fastening and fastening means are not only understood to mean attaching  
and attaching means respectively, but also feed-through and guiding, and feed-through  
means and guiding means respectively, wherein the guiding of a feed-through cable  
30 must particularly be envisaged.

In order to achieve the intended object, a fastening means of the type stated in the preamble has the feature according to the invention that the fastening means for fastening of the fall restraint cable comprises a base having an upright, substantially flat surface at least practically perpendicularly thereof and a hollow tube connected thereto. The fall restraint cable can be guided through the hollow tube, which is generally arranged on top of or optionally on the side of the upright surface, whereby a plurality of anchor points are mutually connected. The person who goes onto for instance a roof, where such fastening means are arranged on anchors, can secure him/herself to the cable by means of a harness, lifeline and sliding carriage. The person on the roof never need uncouple him/herself from the cable, but is found to be secured on the roof at all times.

The upright flat surface of the fastening means preferably has a bent form. The hollow tube of the fastening means more preferably tapers on at least one side, more preferably on both sides of the hollow tube.

In a preferred embodiment the base of the fastening means according to the invention comprises an opening, in particular a round hole. The fastening means can be screwed onto the anchor through such an opening. Also forming part of the invention of course is a fastening means with a solid base without an opening, which can for instance be welded onto the anchor.

The base and the upright surface of the fastening means according to the invention are preferably manufactured integrally. The fastening means according to the invention is more preferably of steel, preferably of stainless steel.

According to another aspect of the invention, an anchor point is provided for fall restraint against falling from a surface, comprising a fastening means according to the invention for fastening a fall restraint cable as described above. The invention particularly provides an anchor point with fastening means which, at least during use, comprises a centre cup covering as described in the non-prepublished NL patent application 1025127 of the present applicant.

The invention also provides a fall restraint system comprising two or more anchor points as described above, wherein, at least during use, the anchor points are mutually connected by means of the fall restraint cable. The fall restraint cable is



generally attached to the anchor of at least two anchor points and is guided through the hollow tubes of the fastening means according to the invention.

5 The invention also provides a surface provided with a surface covering and such an above-specified fall restraint system wherein at least one anchor point is connected to the surface covering. At least this anchor point is preferably connected to the surface covering via a cup covering. In this preferred embodiment the anchor point is not connected directly to the construction but to the surface covering, wherein the forces exerted during a fall on the anchor point for fall restraint according to the invention are transferred to the surface covering via the cup covering and distributed  
10 over the whole surface area of the surface covering. If the fall restraint system however comprises at least one anchor point connected to the surface covering without the use of a cup covering, such a fall restraint system and the surface comprising such a fall restraint system then also form part of the present invention.

15 The surface on which the anchor point comprising the fastening means according to the invention is applied particularly comprises a roof, more in particular a flat roof.

Finally, the present invention provides a method for working in secured manner on a surface using a fall restraint system as described above, wherein a fall restraint means is attached to the fall restraint cable guided through the hollow tubes  
20 of the fastening means of the anchor points.

The person who goes onto the roof with such a fall restraint system with fall restraint cable guided through the hollow tubes of the fastening means on anchors can secure him/herself to this cable by means of a harness, lifeline and sliding carriage. While the person moves over the roof the sliding carriage slides over the cable. The  
25 hollow tube of the fastening means, or the cable feed-through, is preferably made so thin that the sliding carriage slides over the cable feed-through in simple and unimpeded manner. The person on the roof need never uncouple him/herself from the cable. He/she thus always remains secured to the roof.

If the person on the roof does fall, a great force is exerted on the cable. Due to  
30 the height of the cable above the anchor point a great force is also exerted on the anchor point by means of the lever effect. This could affect the attachment of the

anchor to the roof. However, owing to the form of the fastening means of the invention this does not happen. In the case of a fall the cable feed-through folds down, which has two effects. The folding down costs energy, so that the force released onto the anchor is considerably reduced. Secondly, the folding down ensures that the lever effect disappears completely. The cable feed-through ensures that the anchor is not pulled out of the roof.

The force released when a person falls from a roof is enormous. This force is absorbed by the anchor but is also transmitted to the body of the falling person via the lifeline and the harness. Because this force is so great, there is considerable chance of injury. The folding down of the cable feed-through during a fall results in an extra decrease in the force to which the falling person is subjected.

The fastening means according to the invention and the anchor point comprising such a fastening means, as well as the application thereof, therefore provide in any case the following advantages:

- raising the cable above the roof surface
- enabling an uninterrupted passage for the lifeline
- reducing the force released on the anchor during a fall
- reducing the force to which the person is subjected during a fall.

The invention will be further elucidated with reference to a number of figures of a preferred embodiment of the invention:

figure 1 shows an oblique front view of a fastening means comprising a base (1) with opening (2) with an upright, substantially flat surface (3) at least practically perpendicularly thereof and having a bent form (4) and a hollow tube (5) connected thereto;

figure 2 is a front view of a fastening means as shown in figure 1;

figure 3 shows an oblique front view of an anchor point comprising a fastening means which comprises a base (1) with opening (2) with an upright, substantially flat surface

(3) at least practically perpendicularly thereof and having a bent form (4), and connected thereto a hollow tapering tube (5), fastened to an anchor with an upper profile (6) and a cup covering (7) clamped between upper and lower profile;

5 figure 4 is a front view of two anchor points as shown in figure 3, connected by a fall restraint cable (8) which is guided through the hollow tubes (5) of the fastening means.

The figures are otherwise for the most part purely schematic and not drawn to scale.  
10 Some dimensions in particular may be exaggerated to a greater or lesser extent for the sake of clarity. Corresponding parts are designated as far as possible in the figures with the same reference numeral.

Both figure 1 and figure 2 show an embodiment of the fastening means according to the invention, wherein an opening (2) is present in the base.

15 Figure 3 shows an embodiment of the fastening means according to the invention which is fastened, using a bolt through the opening in the base, to an anchor with two profiles, of which only the flat upper profile (6) is visible and which have roughly the same dimension and are intended for clamping a cup covering (7) therebetween.

20 Figure 4 shows two anchor points as shown in figure 3 which are at least almost the same and connected by a fall restraint cable (8) which is guided through hollow tubes (5) of the fastening means.

It is emphasized here that only one embodiment of the anchor point comprising the anchor and fastening means according to the invention is shown. An  
25 anchor point comprising an anchor without cup covering, together with the fastening means with a hollow tube as cable feed-through according to the invention also forms an aspect of the invention.

Although the invention has been elucidated above on the basis of only a single exemplary embodiment, it will be apparent that the invention is by no means limited  
30 thereto. On the contrary, many variations and embodiments are still possible within the scope of the invention for the person with ordinary skill in the art.

## Claims

1. Fastening means intended for an anchor point for fall restraint against falling from a surface and for fastening of a fall restraint cable, characterized in that the fastening means for fastening of the fall restraint cable comprises a base having an upright, substantially flat surface at least practically perpendicularly thereof and a hollow tube connected thereto.
2. Fastening means as claimed in claim 1, characterized in that the upright flat surface of the fastening means has a bent form.
3. Fastening means as claimed in one or more of the foregoing claims, characterized in that the hollow tube tapers on at least one side.
4. Fastening means as claimed in one or more of the foregoing claims, characterized in that the base comprises an opening for fastening to the anchor.
5. Fastening means as claimed in one or more of the foregoing claims, characterized in that the base and the upright surface are manufactured integrally.
6. Fastening means as claimed in one or more of the foregoing claims, characterized in that the fastening means is of steel, preferably of stainless steel.
7. Anchor point for fall restraint against falling from a surface, comprising a fastening means for fastening of a fall restraint cable as described in one or more of the foregoing claims.
8. Anchor point as claimed in claim 7, characterized in that at least during use the anchor point with fastening means comprises a cup covering.

9. Fall restraint system comprising two or more anchor points as described in claim 7 or 8, wherein at least during use the anchor points are mutually connected by means of the fall restraint cable.
- 5 10. Surface provided with a surface covering and fall restraint system as described in claim 9, wherein at least one anchor point is connected to the surface covering.
11. Surface as claimed in claim 10, characterized in that the surface is a roof.
- 10 12. Method for working in secured manner on a surface using a fall restraint system as described in claim 9, wherein a fall restraint means is attached to the fall restraint cable guided through the hollow tubes of the fastening means of the anchor points.

## Abstract

Described is a fastening means intended for an anchor point for fall restraint against falling from a surface and for fastening of a fall restraint cable, wherein the fastening means for fastening of the fall restraint cable comprises a base having an upright, substantially flat surface at least practically perpendicularly thereof and a hollow tube connected thereto. A plurality of such anchor points together, connected for instance using a fall restraint cable guided through the hollow tubes of the fastening means, form a fall restraint system.

Finally, the invention provides a method for working in secured manner on a surface using such a fall restraint system, wherein a fall restraint means is attached to the fall restraint cable guided through the hollow tubes of the fastening means of the anchor points.

Fig. 4